

## Scientific Program

### *Thursday, June 4<sup>th</sup>: Biology of Meiosis*

**08:30 – 9:15**    *Registration*

**09:15**        *Welcome introduction*

**Juan Manuel Corchado**

Research Vice-President University of Salamanca

**José María Medina**

Scientific Board Ramón Areces Foundation

**Sergio Moreno**

IBFG Director

**Juan Luis Santos**

**Ignasi Roig**

**Pedro San-Segundo**

Organizers of the symposium

### Session 1

Chair: **Julie Cooper**

National Cancer Institute, Bethesda, USA

**09:30**        *Different means to a common end*

**Denise Zickler**

Université Paris-Sud, France

**10:00**        *Genome-wide analysis of DNA end resection during yeast meiosis*

**Scott Keeney**

Memorial Sloan Kettering Cancer Center, New York, USA

**10:30**        *Genome location influences meiotic recombination biochemistry*

**Michael Lichten**

National Cancer Institute, Bethesda, USA

**11:00**        *Restriction of Topoisomerase II levels by Aminopeptidase P prevents genome instability*

**Enrique Martínez-Pérez**

Medical Research Council, London, UK

**11:15 – 12:00**    *Coffee break*

## Session 2

Chair: **Terry Hassold**

Washington State University, Pullman, USA

- 12:00**     *Crossing over: from models to crops*  
**Chris Franklin**  
University of Birmingham, Birmingham, UK
- 12:30**     *Chromatin identity crisis: centromeres impersonating telomeres, in meiosis and mitosis*  
**Julie Cooper**  
National Cancer Institute, Bethesda, USA
- 13:00**     *Regulation of chromosome synapsis: mechanistic insights from *C. elegans**  
**Monica Colaiacovo**  
Harvard Medical School, Boston, USA
- 13:30**     *Prophase pathway for removal of a meiosis-specific cohesin from arms of chromosomes during late prophase I of meiosis.*  
**Akira Shinohara**  
Osaka University, Osaka, Japan
- 13:45 – 16:45**     *Poster session and informal lunch*

## Session 3

Chair: **Eva Hoffmann**

University of Sussex, Falmer, UK

- 16:45**     *Transcription dynamically patterns the meiotic chromosome-axis interface*  
**Andreas Hochwagen**  
New York University, New York, USA
- 17:15**     *Meiotic checkpoint control of chromosome dynamics*  
**Pedro San-Segundo**  
Instituto de Biología Funcional y Genómica, CSIC-USAL, Salamanca, Spain
- 17:30**     *ATR is required to complete meiotic recombination and chromosome synapsis in mice*  
**Ignasi Roig**  
Universidad Autónoma de Barcelona, Spain
- 17:45**     *Cdc14b regulates the pachytene checkpoint in mammals*  
**Marcos Malumbres**  
Centro Nacional de Investigaciones Oncológicas (CNIO), Madrid, Spain
- 18:00 – 18:30**     *Coffee break*

- 18:30** *Spatiotemporal control of forkhead binding to DNA regulates the meiotic gene expression program*  
**José Ayté**  
Universidad Pompeu Fabra, Barcelona, Spain
- 18:45** *Isolation and characterization of the *clt-2* mutant and its interactions with the FA/BRC recombination pathway in *Caenorhabditis elegans**  
**Pamela Santonicola**  
CNR Institute of Biosciences and Bioresources, Napoli, Italy
- 19:00** *Multiple mechanisms limit meiotic crossovers: TOP3 $\alpha$  and two BLM homologs antagonize crossovers in parallel to FANCM*  
**Mathilde Seguela-Arnaud**  
Institut Jean-Pierre Bourgin, Versailles, France
- 19:15** *CEP63 controls centriole duplication during prophase I and is required for meiotic recombination and male fertility*  
**Travis Stracker**  
Institute for Research in Biomedicine (IRB), Barcelona, Spain
- 19:30** *Histone H2AX phosphorylation modulates the choice of DSB processing pathway during plant meiosis*  
**Eugenio Sánchez-Morán**  
University of Birmingham, Birmingham, UK

## *Friday, June 5th: Chromosome missegregation and meiotic disorders*

### Session 4

Chair: **Scott Keeney**

Memorial Sloan Kettering Cancer Center, New York, USA

- 09:00** *Exploring the role of replicative stress in cancer and ageing*  
**Óscar Fernández-Capetillo**  
Centro Nacional de Investigaciones Oncológicas (CNIO), Madrid, Spain
- 09:30** *How oocytes try to get it right: spindle checkpoint control in meiosis*  
**Katja Wassmann**  
University of Paris, France
- 10:00** *STAG2 subunit of the cohesin complex is essential for the completion of meiosis in the mouse*  
**Alberto Pendás**  
Centro de Investigación del Cáncer, CSIC-USAL, Salamanca, Spain
- 10:30** *Sex-specific differences in human meiosis*  
**Terry Hassold**  
Washington State University, Pullman, USA
- 11:00** *Sex-specific variation in genome-wide recombination rate is controlled by Meiotic recombination 1 within Hybrid sterility X2 locus*  
**Jiri Forejt**  
Institute of Molecular Genetics, Prague, Czech Republic.

**11:15 – 12:00** *Coffee break*

## Session 5

Chair: **Michael Lichten**

National Cancer Institute, Bethesda, USA

- 12:00** *MeioMaps from oocytes and embryos reveal novel features of recombination and chromosome segregation in human female meiosis with implications for human age-related aneuploidy*  
**Eva Hoffmann**  
University of Sussex, Falmer, UK
- 12:30** *Chromosome missegregation in meiosis and embryo aneuploidy: preimplantation chromosome screening*  
**Xavier Vendrell**  
Sistemas Genómicos, Valencia, Spain
- 13:00** *Molecular mechanisms regulating meiosis in the male: perspective on human spermatogenic failure*  
**Sara Larriba**  
IDIBELL, Barcelona, Spain
- 13:30** *Reproductive effects of double stranded sperm DNA breaks: recurrent miscarriage and implantation failures*  
**Jordi Ribas-Maynou**  
Centro de Infertilidad Masculina y Análisis de Barcelona (Cimab), UAB, Barcelona, Spain
- 13:45** *Altered bivalent positioning in metaphase I human spermatocytes from Robertsonian translocation carriers*  
**Zaida Sarrate**  
Universidad Autónoma de Barcelona, Spain
- 14:00** *Closing Remarks*
- 14:15** *Lunch*
- 16:00** *Local meeting of the Spanish Meiosis Network*
- 17:30** *Guided cultural visit to Monumental Salamanca*